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## Does Off-Shoring IT Make Good Business Sense? Proceed with Caution!

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### Abstract

*IT off-shoring has received much attention in the media for both positive and negative reasons. However, there has been a lack of empirical studies that have critically evaluated the practice of IT off-shoring. This paper reports on the initial phase of a qualitative study of the key factors facilitating and inhibiting the adoption of IT off-shoring in the Australian financial services industry. Empirical data is being collected in a series of in-depth interviews drawing on the first hand experience of a number of senior business managers and senior IT Executives. The initial findings indicate that organisations are generally positively disposed towards the practice of IT off-shoring but are quite selective in what IT they are off-shoring. The findings also revealed that the perceived cost advantages may actually be much lower than expected due to the considerable establishment and management costs associated with IT off-shoring.*

**Keywords:** IT off-shoring, IT outsourcing

### 1. Introduction

IT off-shoring has become very popular largely due to the comparative cost advantages of sending work to countries like India, China and Eastern Europe. There has however been a lack of empirical studies which have critically evaluated the practice of IT off-shoring in terms of both advantages and disadvantages. This paper reports on the first phase of an Australian study that seeks to examine how senior IT executives view off-shoring.

#### 1.1 Definition of IT off-shoring

IT off-shoring occurs when an organisation relocates some section of its domestic IT operations to a foreign country (Lee 2004). IT off-shoring can include ventures that are structured as off-shored IT outsourcing contracts (either with local firms or via multinationals), joint ventures, or wholly-owned subsidiaries (Lee 2004; Trampel 2004). Given the politically sensitive nature of IT off-shoring in the current business climate and the desire for large IT outsourcing vendors to reduce their costs, many IT off-shoring arrangements are a non visible third party arrangement between the IT outsourcing vendor and a local firm. This practice is known as false off-shoring (Klafs 2004).

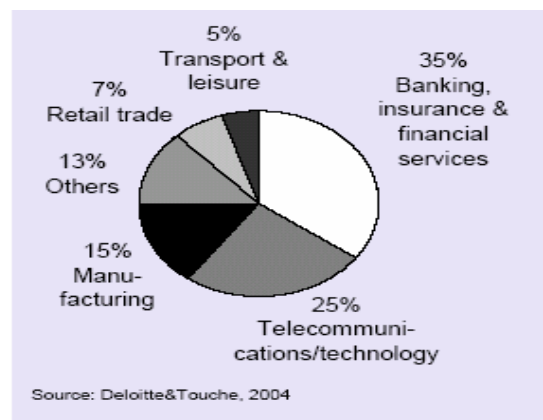
#### 1.2 IT off-shoring destinations

The most prominent overseas IT off-shoring destination is India (Parry 2004; GlobalSourcingNow 2006). In a recent study, Parry (2004) found that more than one-third of the survey respondents have sent IT work there. China was the second most popular with 15% of the business, followed by Russia, Canada, Ireland and Eastern

Europe. These countries have attracted the majority of IT off-shoring operations because they have well educated populations and well established ICT infrastructures.

### ***1.3 IT off-shoring by industry sector***

The phenomenon of IT off-shoring has been more widely adopted in some sectors than others. Financial services providers, software firms, telecommunications companies, electronics and technology companies have so far off-shored more IT than other industries (see Figure 1). These business sectors will continue to take advantage of the cost benefits of off-shore locations. One of key drivers is that IT based processes have come to play such an important part in the cost structures of businesses in these sectors (Schaaf 2004).



**Figure 1 IT Offshore market distribution by industry sector (Source: Economics: digital economy and structure change Schaaf, 2004).**

IT off-shoring has the potential to change the structure of IT services, foster the development of a global supply chain model that is significantly more cost-efficient and force companies to rethink the way they manage their IT services (Schaaf 2004; GlobalSourcingNow 2006). The financial services sector is clearly an excellent place to start for those who wish to examine more closely the dynamics of outsourcing.

## **2. Advantages of IT off-shoring**

Proponents of IT off-shoring argue that the benefits cannot be denied. Costs are not the only reason for organisations to outsource processes to other countries. This type of outsourcing is driven by a variety of considerations. Essentially, the forces driving off-shoring are the desire to achieve economic benefit, technological benefit or strategic benefit – or indeed a combination of these (Schaaf 2004).

**2.1 Cost reduction** is for most organisations, the primary goal of off-shoring. In an increasingly competitive and price conscious environment, organisations are continually exploring various options that might help reduce costs and generate a better bottom line. This goal has stimulated profound changes in the shift of the job market on the global scale (Gentle 2004). Companies must focus on cost optimization improving their core

processes to create a sustainable competitive advantage by building global operating capabilities. The most obvious cost-saving is in labour costs.

### ***2.2 Acceleration of process cycles and avoidance of capacity constraints.***

Although the initial attraction of offshore is often cost savings, reduced time-to-market is another key benefit. By taking advantage of time zone differences, companies can potentially create a 24-hour workday allowing them to accelerate development of product offerings and technology applications (Lee 2004).

### ***2.3 Focus on core competency.***

The division of labour capitalizes on the core competence of each country's labour force (Lee 2004).

## **3. Disadvantages of IT off-shoring**

Thus far, we have examined off-shoring largely from the economic rationalism and globalisation arguments. From this perspective, off-shoring appears to be highly advantageous. In practice, however, many serious stumbling-blocks have emerged, including cultural differences, political stability of destination countries, potential for loss of IP and loss of local IT knowledge and capacity.

### ***3.1 Language and Culture differences***

Language barriers and cultural differences can be a major challenge to organisations off-shoring IT as the risk of miscommunication and a subsequent increase of errors in IT projects is increased (Lee 2004; Matloff 2005).

### ***3.2 Political sensitivities***

Developing countries tend to be more susceptible to political instability, which can increase the risk exposure for a company's operation if they are heavily reliant on IT off-shored in a country which suddenly becomes politically unstable.

### ***3.3 Potential loss of Intellectual Property***

Off-shoring of IT is effective because of concurrent transfer of intellectual property (IP) of organisations to off-shore destination. But IP is not well understood and difficult to value and a significant proportion of the overall value of an organisation. Intangibles are the prime products of many industries and the value of many organisations is largely intangible and IP is a significant component (Wiederhold 2005).

### ***3.4 Loss of ICT knowledge and capability***

The Gartner group argues that CIOs and other business executives should not underestimate the potential negative impact of off-shoring IT on their business strategies, organisation and employees (Morello 2003). Large scale off-shoring of IT could result in a shortage of skilled domestic IT professionals in developed countries like the USA, Europe and Australia if IT is perceived as a career with no future.

## **4. Research questions and method**

Although much valuable work has been done in identifying some of the key issues

relating to off-shoring, only a limited amount of work has addressed perhaps the fundamental issue, namely the experience of individual organizations as they have adopted off-shoring initiatives. In this project we focus on the way in which a number of senior IT managers and executives operating in the Australian financial services sector have experienced off-shoring. The financial services sector is clearly the best place to start. This sector been at the forefront of the drive to off-shore IT and the greatest amount of practical experience of off-shoring is to be found here. Our project involves a qualitative study which will be followed by a large-scale survey. At this juncture, we are in the process of conducting the qualitative work and we report exclusively on this phase.

The two research questions investigated in this interpretative study of IT off-shoring are:

- RQ1: What do you consider to be the main advantages of IT off-shoring?
- RQ2: What do you consider to be main disadvantages of IT off-shoring?

A series of in depth interviews will allow the researchers to identify and explore the key issues that were raised in a set of semi structured research questions in an interpretative manner in line with the research objectives of this study (Miles & Huberman, 1994; Yin, 1994). The informants in these in depth interviews are senior IT executives and senior business managers. The informants were purposively chosen from 11 organisations to present the views of both users and providers of IT services in the financial services sector. This sector was chosen as it is a heavy user of IT services and many organisations in this sector have or are strongly considering the practice of IT off-shoring. The semi-structured research questions allow the informants to express their opinions on a wide range of issues regarding the practice of IT off-shoring. Content analysis was considered an appropriate qualitative method to analyse and interpret the data collected.

Using an interpretative approach allows us to gain valuable insights into the key issues which need to be considered by organisations when deciding whether and what IT to offshore. The data is being analysed using the software package NVivo which facilitates the management of the analysis process for qualitative data. NVivo allows researchers to code large volumes of qualitative text for recurring themes and patterns in a rigorous, verifiable manner. The data is then gradually reduced and abstracted by the researcher(s) into more generalisable theory and frameworks (Miles and Huberman 1994; Richards 1999; Carroll and Swatman 2002; Gibbs 2002).

## **5. Results**

At this stage, we have conducted most of the interviews and are working on data analysis. To our surprise, our informants are less than equivocal about the benefits of off-shoring and there is some evidence for a polarity of opinion.

Thus far, about half of the informants were negatively predisposed towards IT off-shoring and a significant number felt that there was little to be gained by off-shoring IT. There is also substantial evidence which suggests that few of the organisations surveyed have

chosen to off-shore on a pervasive scale. The majority of organisations seem to begin by experimenting with off-shoring small IT projects, gradually increasing the scope. A notable exception is one organisation that has a well established, wholly owned subsidiary overseas. This organisation has off-shored more aggressively than the others.

It would appear that the majority of organisations have a positive slant on off-shoring when they have never been involved in the process before and that many of the negative predispositions we have encountered emanate from actual experiences with off-shoring.

Our results also support much of the previous research discussed above, especially in terms of the advantages of off-shoring. A number of issues that have been less explored, or even unexplored, have also emerged, particularly as regards potential disadvantages.

### ***5.1 Advantages of IT off-shoring***

Predictably, the majority of interview informants were of the opinion that there were significant cost advantages in off-shoring specific aspects of the IT function such as testing and routine maintenance because of the significantly lower wages in off-shoring destinations like India and China. It would appear, however, that these cost advantages are not perceived to apply across the board. The keyword seems to be 'selectivity'. It would appear that choosing which projects to off-shore has become a key issue.

Some informants also felt that there are significant advantages gained because off-shoring of IT projects allowed IT project work to be pipelined 24 hours around the clock. This allows IT projects to be delivered quicker to the market. One informant noted that IT off-shoring had allowed his organisation to ramp up the delivery of IT projects because of pipeline effect of having software developers working on an IT project around the clock.

### ***5.2 Disadvantages of IT off-shoring***

A significant number of informants are of the opinion that off-shoring (or even outsourcing) some projects is a recipe for disaster, i.e. the very act of off-shoring is a disadvantage. This reinforces the importance of the concept of selectivity, which we have mentioned before. A number of informants also expressed that there have been many off-shoring disasters that are not public knowledge.

A significant number of the informants also felt that the cost savings to be gained from off-shoring IT were much less once you took into account the significant associated establishment and management costs. Another significant area of concern was how to ensure that an organisation was able to protect its intellectual property (IP) in an IT project which had been off-shored. Many informants were worried about losing control of their IP and subsequent loss of revenue.

## **6. Initial conclusions**

Our initial findings suggest that IT off-shoring is viewed more cautiously by many organisations than we would have predicted. In general, organisations that are off-shoring IT are quite selective about what IT is off-shored and are becoming more resistant to the

‘hype’. This may be due to the fact that organizations have more direct experience with the positive and negative outcomes of off-shoring.

The communication problems associated with IT off-shoring has emerged as an important area of concern. The problem seems to go deeper than the obvious cross-cultural communication issue. Concerns were expressed about variances in corporate culture, project management and geography.

We are also interested and somewhat surprised to note that a significant number of informants are less than enthusiastic about the quality of product delivered via off-shoring arrangements, despite the fact that many companies that offer off-shoring services have high levels of international quality certification (e.g. CMM level 5 is common). When this issue is combined with the fact that off-shoring involves significant establishment and ongoing management costs, there is some question as to whether the cost advantages of off-shoring have not been overstated.

That being said, there is some consensus that when the right project and overseas partner is chosen and the project is well managed, substantial cost and time savings are likely.

Our initial findings suggest that IT off-shoring is a complex process that needs to be carefully considered and managed by organisations. It would be unwise for any company to rely upon generalised dictums such as ‘off-shoring is cheaper’ to justify venturing into off-shore waters. Each candidate project requires careful evaluation in terms of its inherent suitability for off-shoring and the broader impact on the organization of off-shoring in general and any specific project in particular. Our informants advocate an approach that is perhaps best expressed as: By all means proceed, but be cautious.

## References

- Ahad, F. “Off-shore outsourcing : here to stay,” *MinterEllison Technology News: Off-shoring edition*, July 2004.
- Carmel, E., and Agarwal, R. "The maturation of offshore sourcing of information technology work," *MIS Quarterly Executive* (12:Summer), 2002, pp. 72-80.
- Carroll, J.M., and Swatman, P.A. “Structured case: A methodological framework for building theory in information systems research,” *European Journal of Information Systems* (9:4), 2000, pp. 235-42.
- Espinosa, J.A. and Carmel, E. "The impact of time separation on coordination in global software teams: A conceptual foundation," *Software process improvement and practice* (8:10), 2004, pp. 1-18.
- Farrell. “Beyond off-shoring—Assess your company’s global potential,” 2004, <http://www.manyworlds.com/exploreCO.aspx?coid=CO1210414525905>
- Frank, S. “Source out, Risk in,” *IEEE Spectrum*, April 2005.
- Gentle. “The titans take hold how Off-shoring has changed competitive dynamic for global financial services institutions,” *Deloitte Research Report*, Deloitte, 2004,

- <http://www.deloitte.com/dtt/research/0,2310,cid%3D51146&pre%3DY&lid%3D1,00.html>
- Gibbs, G.R. *Qualitative Data Analysis: Explorations with NVivo*, Open University Press, Buckingham – Philadelphia, 2002.
- GlobalSourcingNow. “Offshoring of IT Services – Present and Future,” *GlobalSourcingNow* - *Evalueserve*, 2006, [http://www.globalsourcingnow.com/gsn\\_reports.asp](http://www.globalsourcingnow.com/gsn_reports.asp)
- Heidari. “How to protect IP in off-shoring craze,” *EETIMES*, 2005, <http://www.eetimes.com/showArticle.jhtml?ArticleID=166401417>
- Ho, Torres and Vu “Dynamics of Outsourcing: Offshoring, Insourcing, and a Case Study—India,” 2004, <http://depts.washington.edu/gttl/studentPapersAbstracts/2004/DynamicsofOutsourcing.pdf>
- Kearney, A.T. “A.T. Kearney's 2004 Off-shore Location Attractiveness Index: Making off-shore decisions,” A. T. Kearney, 2004, [http://www.atkearney.com/shared\\_res/pdf/Making\\_Offshore\\_S.pdf](http://www.atkearney.com/shared_res/pdf/Making_Offshore_S.pdf)
- Kirkpatrick. “Rage against Off-shoring is off target,” 2004, <http://www.cnn.com/2004/TECH/ptech/02/23/fortune.ff.rage.offshoring>
- Lee. “Making the offshore call: The roadmap for communications operators,” *Deloitte Research Report*, Deloitte, 2004, <[http://www.deloitte.com/dtt/cda/doc/content/deloitte%20research\\_offshoring%20call\\_mar2004.pdf](http://www.deloitte.com/dtt/cda/doc/content/deloitte%20research_offshoring%20call_mar2004.pdf)>
- Matloff, N. “Off-shoring: What can go wrong?” *IT Pro* (July/August), 2005, pp. 39-45.
- Miller, M.J. “Forward thinking—the benefits of offshore outsourcing,” 2004, <http://www.pcmag.com/article2/0,1759,1573770,00.asp>
- Miles, M.B. and Huberman *Qualitative Data Analysis: An Expanded Sourcebook*, Sage Publications, Inc., Thousand Oaks, CA, 1994.
- Monks. “Off-shoring, a risky business?” 2004, <http://www.continuitycentral.com/feature0091.htm>
- Morello, D. “US off-shore outsourcing leads to structural changes and big impact,” *CIO Magazine*, August 13, 2003, <http://www.cio.com>
- Parry. “Study: Execs believe most jobs should stay onshore,” *CIO Magazine*, 2004, <http://www.cio.com>
- Rawat. “Myth— Off-shoring is an option for CIOs and IT departments,” 2005, [http://www.dmreview.com/article\\_sub.cfm?articleId=1018121](http://www.dmreview.com/article_sub.cfm?articleId=1018121)
- Reh. “Offshoring, Smart business or Short sightedness,” 2005, <http://www.management.about.com/cs/generalmanagement/i/offshoring.htm>
- Richards, L (ed.) *Using QSR NVivo for Qualitative Analysis, Investigating the Social World*, Pine Forge Press, Thousand Oaks, 1999.



- Schaaf. "economics: digital economy and structural change," September, 2004, [http://www.dbresearch.com/PROD/DBR\\_INTERNET\\_EN-PROD/PROD0000000000179790.pdf](http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000179790.pdf)
- Trampel, J. "To offshore or nearshore IT services? - An investigation using transaction cost theory," 2004, <http://econwpa.wustl.edu/eprints/io/papers/0406/0406001.abs>
- Vinas. "IBM's Off-shoring adventure," October 2004, <http://www.industryweek.com>
- Wiederhold, G. "Tax Consequences from Offshoring\* Intellectual Property Thinking points, not an argument pro or con offshoring \* off-shore outsourcing", Stanford University, 2005, <http://www-db.stanford.edu/people/gio.html>
- Yin, R.K. *Case Study Research: Design and Methods*, 2<sup>nd</sup> ed., Vol. 5, 14 Vols., Applied Social Research Methods Series, Sage Publications, Thousand Oaks, CA, 1994.